

Remarks/Arguments

The Examiner is thanked for the careful review of this Application. Claims 1-20 are pending after entry of the present Request for Reconsideration. No new matter has been introduced.

Rejections under 35 U.S.C. § 102:

The Office has rejected claims 1-11 and 13-20 under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,603,678 to Nickel et al. (Nickel). For at least the following reasons, the Applicants submit that Nickel fails to disclose each and every feature of independent claims 1, 11, and 16.

For instance, among other features, independent claims 1, 11, and 16 recite writing magnets. As disclosed in the specification of the subject application, the writing magnets cause enough magnetic field strength so as to switch the magnetic alignment of the magnetic device. Nickel, however, fails to disclose writing magnets, as defined in the subject application.

In rejecting claims 1-11 and 13-20, the Office has characterized the heating lines 120 of Nickel as being the same as the claimed writing magnets. The Applicants respectfully traverse the Office's assertion. It is respectfully submitted that the heating lines 120 do not have the same characteristics as the writing magnets specified in the claims. Nor do the heating lines 120 provide the same functionalities as the claimed writing magnets. Rather, the heating lines 120 function to heat the associated memory elements. By thermally assisting the switching of selected memory elements, Nickel improves the reliability of storing data in an MRAM device.

Additionally, as defined in independent claims 1 and 16, a writing magnet is disposed opposite the first end of the magnetic device and is separated from the first end of the magnetic device by an insulator. In the same manner, the other writing magnet is disposed opposite the second end of the magnetic device and is separated from the second end of the magnetic device by an insulator. Nickel, however, discloses a heating line 120 that is a continuous path, and is defined either over the memory element or below the memory element. That is, contrary to the claimed invention, the heating lines 120 overlap the entire associated memory elements.

The Applicants further traverse the Office's interpretation that Nickel discloses separating the first and second ends of the magnetic device from the writing magnets by a corresponding insulator. To arrive at the Office's assertion, the Office has interpreted that components 120a and 120b of Nickel are the writing magnets and insulators, respectively, of the claimed invention.

The Applicants' respectfully submit that the components 120b of Nickel are not the same as the insulators of the claimed invention. Support for the Applicants' interpretation can be found in several excerpts of Nickel. For instance, in column 4, lines 52-57, Nickel provides:

Reference is now made to FIG. 4, which shows an exemplary construction of the heating line 120. The heating line 120 includes copper traces 120a separated by heating elements 120b made of tungsten or platinum or other highly resistive metal. The heating elements are positioned over the memory elements 114. [Emphasis added.]

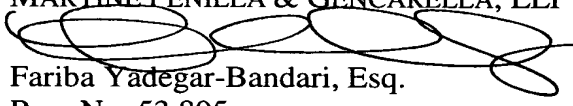
Based on the foregoing excerpt, the components 120a interpreted to be the writing magnets of the claimed invention are separated by heating elements 120b which are metal, and not insulators. Furthermore, none of the other components disclosed in Nickel can function as the claimed insulators.

Accordingly, independent claims 1, 11, and 16 are respectfully submitted to be patentable under 35 U.S.C. § 102(e) over Nickel. In a like manner, dependent claims 3-10, 13-15, and 17-20 each of which directly or indirectly depends from the applicable independent claim are submitted to be patentable under 35 U.S.C. § 102(e) over Nickel for at least the reasons set forth above regarding the respective independent claim.

Indication of Allowability:

The Applicants hereby acknowledge the allowability of claim 12.

As such, the Applicants respectfully request examination on the merits of the subject application, and submit that all of the pending claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. If the Examiner has any questions concerning the present Request for Reconsideration, the Examiner is kindly requested to contact the undersigned at (408) 774-6913. If any additional fees are due in connection with filing this Request for Reconsideration, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. MXICP024). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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